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IIUM Medical Journal Malaysia
Volume 20, Issue 1, January 2021, Pages 127-135

Relevant Local Fatwā on the Issues of Using Human Tissues in Articular Cartilage Tissue Engineering Experimentation (Article) (Open Access)

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Abstract

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In articular cartilage tissue engineering (ACTE) experimentation, the researchers have utilised cells and tissues sampled from the human donor for research purposes. The cells and tissues may be harvested from the living donor's discarded tissues through a medical procedure, e.g. the total knee replacement surgery. The small pieces of a tissue sample taken from the human donor are essential to study the articular cartilage regeneration for treating joint disease, i.e. osteoarthritis. However, the procedure has raised some ethical and fiqh (Islamic jurisprudence) concerns. The study was done by utilising the secondary analysis of local Muslim jurists' opinions (fatwā) related to the sampling of human biological samples. This paper explores the scenarios of using cell sources taken from the living human donor through the existing fatwā of local Muslim jurists (fuqahā'). The scenarios include: (1) taking samples from the living donor, and (2) discarding human tissue, as practised in ACTE experimentation. The current fatwā has shown that honouring every part of a human body is considered essential in Islam. ACTE researchers may utilise the biological samples from living donors as alternatives in studying articular cartilage regeneration. The donation of human biological samples for research purposes in ACTE experimentation, obtained from a medical procedure, may be permissible, should the stipulated terms and conditions were observed, and the procedure does not cause any additional harm to the donor. © 2021. All Rights Reserved.

SciVal Topic Prominence ⓘ

Topic: Articular Cartilage | Chondrocytes | Lysholm Knee Score

Prominence percentile: 98.694 ⓘ

Author keywords

Articular cartilage cell sources experimentation Malaysian fatwā tissue engineering

Funding details

Funding sponsor	Funding number	Acronym
Ministry of Higher Education	TRGS/1/2016/UIAM/02/8 - TRGS16-02-003-0003	MOHE
International Islamic University Malaysia		IIUM

Funding text

The authors thanked International Islamic University Malaysia (IIUM) and expressed their gratitude to the Ministry of Higher Education for their support and for providing the Transdisciplinary Grant Scheme (TRGS/1/2016/UIAM/02/8 - TRGS16-02-003-0003).

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